

**REMARKS**

This Amendment is prepared in response to the Office action mailed on 15 December 2003 (Paper No. 2). Upon entry of this amendment, claims 16-19 will be pending. Applicant has canceled claims 1-15 without prejudice or disclaimer as to their subject matter by this amendment and has newly added claims 16-19 by this amendment.

In the Office action, the Examiner objected to the specification for informalities, specifically typographical errors. In this Amendment, Applicant corrected the typographical errors and other minor errors. Withdrawal of the objection is respectfully requested.

In Paper No. 2, the Examiner rejected claims 1, 2, 8, 9, 12 and 14 under 35 U.S.C. 102 (b) as being anticipated by Widergen *et al* (USP 5,890,064). In Paper No. 2, the Examiner also rejected claims 3-7, 10, 11, 13 and 15 under 35 U.S.C. 103 (a) as being unpatentable over Widergen '064 in view of Lu *et al*. (USP 5,999,813). Applicant has the following comments:

**I. Regarding Widergen '064, Applicant submits that Applicant's invention is different from Widergen '064 for the following reasons:**

### **1. Structural Differences**

Applicant submits that Widergen (US 5,890,064) has a structure that a WO Gateway is connected to a public mobile communication network through a PTN and a PSTN, while the present invention has a structure that a BSC of a private mobile communication network is directly connected and interworked with a public mobile communication network. This is one way Applicant's invention is different and novel from Widergen '064.

### **2. Difference in how calls from a private mobile to a public mobile are handled**

Regarding calls made from the private mobile communication network to the public mobile communication network, Applicant has the following comments. In the Widergen '064, calls from CMTs in private cell 142 to a PMT in PLMN 102 (see case 5 for example) are routed via WO Gateway-> PTN->PSTN->GMSC->MSC. (col. 9, line 39 through col. 10, line 1). On the contrary, in the present invention, a public/private communication service unit transmits a call origination message to a public mobile communication network transparently.

### **3. Difference in how calls from a mobile phone in a mobile network to a phone in a land network are handled**

Applicant also submits that in a structure of Widergen '064, a call message must

be changed in order to route a call from a wireless communication network to a wired communication network. However, in Applicant's invention has a construction that a private mobile communication network and a public mobile communication network can be interworked with each other, and therefore it is possible to transmit a call to the public mobile communication network without changing the call.

**4. Difference in how calls from private mobile to private mobile are handled regarding accessing public network resources:**

Widergen '064 discloses that even when an originating call is originated in a private network, the call is routed from WO Gateway to PTN (if a called terminal is CMT), and then the call is routed from PTN to WO Gateway again. Therefore, Widergen '064 has structure that the call is performed by accessing to a HLR of a public mobile communication network in order to determine information on the call. (See case 2 and Col. 7, lines 55 to col 8, line 20). On the other hand, the present invention has a structure of performing a corresponding call access without using a public network resource, if it is determined that a call is for a private mobile communication network.

In view of the above four difference, Applicant submits that the present invention is definitely distinguished from Widergen '064.

**II. The following are differences between the present invention and Lu *et al* (US 5,999,813):**

**1. In Paper No. 2, the Examiner alleges the present invention is similar to Lu '813 et al in that a BSC of Lu et al plays a role of an interface between a MSC and a BTS. Applicant disagrees.**

Applicant submits that in Lu '813, cPBX operates as a BSC belonging to a public network element or an MSC belonging to a private network element depending on the type of a call. In contrast, Applicant's invention provides a private mobile communication network service unit that transparently transmits a call to the BSC of the PLMN according to a type of a call. This unit also provides private network communication service, without being changed according to the type of the call.

In Lu '813, a cPBX is connected to a MSC of the PLMN. In Lu '813, the cPBX operates as 1) a BSC of the PLMN or 2) an MSC of the private mobile communication network depending on the type of a call. In contrast, in Applicant's invention, a public/private communication service unit is connected to the BSC of the PLMN. This public/private communication service unit plays a role of 1) transparently transmitting a call to the PLMN or 2) performs the private mobile communication network service according to the type of call. Thus, Applicant's invention is entirely dissimilar to Lu '813.

## **2. Handling of calls from a private mobile to a public mobile station.**

For private mobile to public mobile calls, the cPBX of Lu '813 operates as the BSC of the PLMN and transmits a call to a MSC of the PLMN. In contrast, in Applicant's invention, for private mobile to public mobile calls, a public/private communication service unit transmits transparently a call to the BSC of the PLMN. That is to say, unlike Lu '813, the public/private communication service unit of Applicant's invention transmits the call to the public network. Unlike Lu '813, Applicant's public/private communication service unit does not serve to usurp the role of a part (the BSC) of the PLMN.

## **3. Handling of calls from private mobile to private mobile station.**

In private mobile to private mobile calls of Lu '813, the cPBX performs a call routing by operating as the MSC of the private network. Therefore, a separate BSC of the PLMN is separately required in Lu '813. However, in Applicant's invention, a public/private communication service unit connected to a private BTS performs a corresponding service.

## **4. Establishment of a path of an originating call.**

Referring to col. 15, lines 50-54 of Lu '813, it can be appreciated that a call for the private mobile communication network and a call for the PLMN is determined by location information of a VLR within pMSC. Contrarily, in Applicant's invention, the

private network call and the public network call is determined according to a call origination message transmitted from a terminal.

For the above four reasons, Applicant submits that Applicant's invention is entirely dissimilar to that of Lu '813.

Applicant has newly added claims 16-19 by this amendment. These claims claim features not found in the applied prior art of Widergen '064 or Lu '813. In particular, these claims claim that private mobile to public mobile calls are sent transparently, that it is the analyzing of the call origination message that is used to characterize the calls. Entry of and favorable examination of these claims is respectfully requested.

In view of the above, it is submitted that the claims of this application are in condition for allowance, and early issuance thereof is solicited. Should any questions remain unresolved, the Examiner is requested to telephone Applicant's attorney.

A fee of \$86 is incurred by the addition of one (1) independent claim in excess of 3. In addition, \$420.00 is incurred by filing of a Petition for a two month extension of time. Applicant's check in the total amount of \$506.00 drawn to the order of Commissioner accompanies this Response. Should the check become lost, be deficient in payment, or should other fees be incurred, the Commissioner is authorized to charge Deposit Account No. 02-4943 of Applicant's undersigned attorney in the amount of such fees.

Respectfully submitted,



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Date: 5/14/04  
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